

REMARKS/ARGUMENTS

Claims 1-6, 10, 12, 14-18, 65 and 66 are active. Claims 7-9, 11, 13, and 19-64 have been withdrawn from consideration. Claim 1 has been amended to remove non-elected subject matter (without prejudice to its appearance in a Divisional Application), to require a mutation at W550 and to include a functional limitation. No new matter is believed to have been added. Favorable consideration of these amendments and allowance of the case are respectfully requested.

Interview Summary Record

The Applicants appreciate the courteous and helpful interview with Examiner Hutson conducted on March 3, 2011. It is believed that agreement was reached with respect to enablement of the claims as directed to polypeptides comprising a mutation at W550 that have DNA polymerase activity. The Examiner requested additional information about the deposited biological materials named in claim 65. The double patenting rejection of claim 65 was reviewed and was indicated to be based on the appearance of two of the species named in claim 65 in a prior patent. Applicants were advised to look at claim 4 of U.S. Patent No. 7,417,133 to avoid potential double patenting rejections.

Restriction/Election

The Applicants previously elected with traverse **Group I**, claims 1-18, 65 and 66, directed to polynucleotides. A provisional election for examination purposes only was made of the following species: (1) polynucleotide sequences encoding for polypeptides having 80% identity to residues 13-555 of SEQ ID NO: 26, wherein said polypeptide has at least one mutation, at position **W550** (position 827 of the Taq polymerase wild-type) (at least claims 1-18, 65 and 66 readable thereon); and (1) polynucleotide SEQ ID NO:21 (at least claims 1-18,

65 and 66 readable thereon). The requirement has been made FINAL. The Applicants respectfully request that the claims of the nonelected group(s) or other withdrawn subject matter which depend from or otherwise include all the limitations of an allowed elected claim, be rejoined upon an indication of allowability for the elected claim, see MPEP 821.04.

Objection—Claims

Claims 1, 3-6, 10, 12, 14-18, 65 and 66 were objected to as containing non-elected subject matter. This objection is moot in view of the removal of the nonelected subject matter from the claims.

Objection—Specification

Page 34 of the specification was objected to as being unclear as to what the monoclonal phages containing or how they were generated. The Applicants note that pages 34 as well as claim 65 describes deposited monoclonal phages and thus meets the requirements of 35 U.S.C. 112, first paragraph. See MPEP 2402:

Every patent must contain a written description of the invention sufficient to enable a person skilled in the art to which the invention pertains to make and use the invention. **Where the invention involves a biological material and words alone cannot sufficiently describe how to make and use the invention in a reproducible manner**, access to the biological material may be necessary for the satisfaction of the statutory requirements for patentability under 35 U.S.C. 112.

In the present situation, it appears that the Examiner believes that words alone cannot sufficient describe the biological materials on page 34 of the specification. Thus, as provided for by the Biological Deposit Rules an acceptable biological deposit of these materials has been provided under the terms of the Budapest Treaty.

Moreover, phage library constructs were known in the art as described for example in the following publications:

Vichier-Guerre, et al., *Biocatalysis and Biotransformation* 21(2); 75-78 (2003),
“Iterative Cycles of In Vitro Protein Selection for DNA Polymerase”.

Strobel, et al., *Sequence Molecular Biotechnology* 24(1), May, 2003, “Efficient
Display of Two Enzymes of Filamentous Phages Using an Improved Signal”.

Rejection—35 U.S.C. §112, second paragraph

Claims 65 and 66 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite with regard the described phages. As indicated above an acceptable deposit of these materials has been made under the terms of the Budapest Treaty. Moreover, a biological deposit can be used to meet the requirements of 35 U.S.C. 112, including the description requirement and that of 35 U.S.C. 112, second paragraph, see MPEP 2403:

Although the issue of the need to make a deposit of biological material typically arises under the enablement requirement of the first paragraph of 35 U.S.C. 112, the issue could also arise under the description requirement (35 U.S.C. 112, first paragraph), best mode requirement (35 U.S.C. 112, first paragraph) or the requirements of the second paragraph of 35 U.S.C. 112 with respect to the claims.

Consequently, this rejection cannot be sustained because even if the nature of the phages could not be adequately described in words, the requirements of 35 U.S.C. 112 are met by the deposit.

Rejection—35 U.S.C. §112, first paragraph

Claims 1, 3-6, 10, 12, 14-18, 65 and 66 were rejected under 35 U.S.C. 112, first paragraph, as lacking adequate written description for polypeptides “having a mere 95% identity to residues 13-55 of SEQ ID NO: 26”.

Obviousness-Type Double Patenting

Claim 66 was rejected under the judicially-created doctrine of obviousness-type double patenting as being patentably indistinct from claim 15 of U.S. Patent No. 7,417,133.

This rejection is moot in view of the amendment of claim 66 to omit the two overlapping species between the two claims.

Claim 4 of U.S. Patent No. 7,417,133

No rejection has been lodged based on claim 4 of this patent. However, this claim was mentioned in the Interview as possibly raising obviousness double patenting issues. Any such issues are moot in view of the attached terminal disclaimer over this patent. The present application claims priority via a PCT application (published in English) to U.S. Application 10/787,219, filed February 27, 2004, which issued as U.S. Patent No. 7,417,133. Thus, the prior patent is not prior art to this application.

Conclusion

This application presents allowable subject matter and the Examiner is respectfully requested to pass it to issue. The Examiner is kindly invited to contact the undersigned should a further discussion of the issues or claims be helpful.

Respectfully submitted,

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